

# UW 50/S - Panel feed-through terminal block



1713709

<https://www.phoenixcontact.com/us/products/1713709>

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Panel feed-through terminal block, connection method: Screw connection with tension sleeve, Screw connection with tension sleeve, number of positions: 1, load current: 150 A, connection direction of the conductor to plug-in direction: 0 °, width: 18.8 mm

## Your advantages

- Well-known connection principle allows worldwide use
- Low temperature rise, thanks to maximum contact force
- Tool-free snap-in principle enables easy mounting on the device panel
- Automatic panel thickness compensation enables universal use

## Commercial data

Item number	1713709
Packing unit	20 pc
Minimum order quantity	20 pc
Sales key	AA28
Product key	AA1FDA
GTIN	4055626325996
Weight per piece (including packing)	93.27 g
Weight per piece (excluding packing)	89.3 g
Customs tariff number	85369010
Country of origin	CN

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## Technical data

### Product properties

Product type	Panel feed-through terminal block
Product family	UW 50
Number of positions	1
Pitch	18.8 mm
Number of connections	2
Number of potentials	1

### Electrical properties

Nominal current $I_N$	150 A
Nominal voltage $U_N$	800 V
Degree of pollution	3
Rated voltage (III/3)	800 V
Rated surge voltage (III/3)	8 kV
Rated voltage (III/2)	1000 V
Rated surge voltage (III/2)	8 kV
Rated voltage (II/2)	1000 V
Rated surge voltage (II/2)	6 kV

### Connection data

#### Connection technology

Connector system	UW 50
Nominal cross section	50 mm <sup>2</sup>

#### Conductor connection exterior

Connection method	Screw connection with tension sleeve
Connection direction of the conductor to plug-in direction	0 °
Single-conductor/terminal point multi-stranded	16 mm <sup>2</sup> ... 50 mm <sup>2</sup>
Conductor cross section flexible	16 mm <sup>2</sup> ... 50 mm <sup>2</sup>
Conductor cross section flexible, with ferrule without plastic sleeve	10 mm <sup>2</sup> ... 50 mm <sup>2</sup>
Conductor cross section, flexible, with ferrule, with plastic sleeve	10 mm <sup>2</sup> ... 50 mm <sup>2</sup>
2 conductors with same cross section, solid	6 mm <sup>2</sup> ... 16 mm <sup>2</sup>
2 conductors with same cross section, flexible	10 mm <sup>2</sup> ... 16 mm <sup>2</sup>
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	6 mm <sup>2</sup> ... 16 mm <sup>2</sup>
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	6 mm <sup>2</sup> ... 10 mm <sup>2</sup>
Internal cylindrical gage	A10 / B10
Stripping length	24 mm
Tightening torque	6 Nm ... 8 Nm

#### Conductor connection interior

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Connection method	Screw connection with tension sleeve
Connection direction of the conductor to plug-in direction	0 °
Single-conductor/terminal point multi-stranded	16 mm <sup>2</sup> ... 50 mm <sup>2</sup>
Conductor cross section flexible	16 mm <sup>2</sup> ... 50 mm <sup>2</sup>
Conductor cross section flexible, with ferrule without plastic sleeve	10 mm <sup>2</sup> ... 50 mm <sup>2</sup>
Conductor cross section, flexible, with ferrule, with plastic sleeve	10 mm <sup>2</sup> ... 50 mm <sup>2</sup>
2 conductors with same cross section, solid	6 mm <sup>2</sup> ... 16 mm <sup>2</sup>
2 conductors with same cross section, flexible	10 mm <sup>2</sup> ... 16 mm <sup>2</sup>
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	6 mm <sup>2</sup> ... 16 mm <sup>2</sup>
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	6 mm <sup>2</sup> ... 10 mm <sup>2</sup>
Internal cylindrical gage	A10 / B10
Stripping length	24 mm
Tightening torque	6 Nm ... 8 Nm

## Mounting

Plate thickness	1 mm ... 4 mm
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## Material specifications

### Material data - contact

Note	WEEE/RoHS-compliant, free of whiskers according to IEC 60068-2-82/JEDEC JESD 201
Contact material	Al alloy
Surface characteristics	tin-plated

### Material data - housing

Color (Housing)	gray (7042)
Insulating material	PA
Insulating material group	I
CTI according to IEC 60112	600
Flammability rating according to UL 94	V0
Glow wire flammability index GWFI according to EN 60695-2-12	850
Glow wire ignition temperature GWIT according to EN 60695-2-13	775
Temperature for the ball pressure test according to EN 60695-10-2	125 °C

## Notes

General	The cable entry funnel is not touch-proof. Never connect or disconnect the terminal when it is energized. Take appropriate steps to ensure touch proofness.
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## Safety note

# UW 50/S - Panel feed-through terminal block



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Safety note	<ul style="list-style-type: none"> <li>• Only electrically qualified personnel may install and operate the product. To recognize and prevent danger, the qualified personnel must be familiar with the basics of electrical engineering.</li> </ul>
	<ul style="list-style-type: none"> <li>• Observe the technical data provided here and refer to the documents listed under “Downloads”. The download area contains important information, such as installation notes, technical drawings, and 3D data.</li> </ul>
	<ul style="list-style-type: none"> <li>• The cable entry funnel is not safe to touch. Never connect or disconnect the terminal when it is energized. Take appropriate steps to ensure touch protection.</li> </ul>

## Dimensions

Dimensional drawing	
Pitch	18.8 mm
Width [w]	18.8 mm

### External dimensions

Width [w]	18.8 mm
Height [h1]	54 mm
Length [l1]	35 mm

### Internal dimensions

Width [w]	18.8 mm
Height [h2]	54 mm
Length [l2]	45.3 mm

## Mechanical tests

### Test for conductor damage and slackening

Specification	IEC 60947-7-1:2009-04
Result	Test passed

### Pull-out test

Specification	IEC 60947-7-1:2009-04
Conductor cross section/conductor type/tractive force setpoint/actual value	16 mm <sup>2</sup> / stranded / > 100 N
	16 mm <sup>2</sup> / flexible / > 100 N
	50 mm <sup>2</sup> / stranded / > 236 N
	50 mm <sup>2</sup> / flexible / > 236 N

## Electrical tests

### Temperature-rise test

Specification	IEC 60947-7-1:2009-04
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Requirement temperature-rise test	Increase in temperature $\leq 45$ K
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## Short-time withstand current

Specification	IEC 60947-7-1:2009-04
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## Air clearances and creepage distances | 1. Insulation coordination

Specification	IEC 60947-1:2007-06 + A1:2010-12
Insulating material group	I
Comparative tracking index (IEC 60112)	CTI 600
Rated insulation voltage (III/3)	800 V
Rated surge voltage (III/3)	8 kV
minimum clearance value - non-homogenous field (III/3)	8 mm
minimum creepage distance (III/3)	10 mm
Rated insulation voltage (III/2)	1000 V
Rated surge voltage (III/2)	8 kV
minimum clearance value - non-homogenous field (III/2)	8 mm
minimum creepage distance (III/2)	8 mm
Rated insulation voltage (II/2)	1000 V
Rated surge voltage (II/2)	6 kV
minimum clearance value - non-homogenous field (II/2)	5.5 mm
minimum creepage distance (II/2)	5.5 mm

## Environmental and real-life conditions

### Vibration test

Specification	IEC 60068-2-6:2007-12
Frequency	10 - 150 - 10 Hz
Sweep speed	1 octave/min
Amplitude	0.35 mm (10 Hz ... 60.1 Hz)
Acceleration	5g (60.1 Hz ... 150 Hz)
Test duration per axis	2.5 h

### Glow-wire test

Specification	IEC 60695-2-11:2014-02
Temperature	960 °C
Time of exposure	30 s

### Shocks

Specification	IEC 60068-2-27:2008-02
Pulse shape	Semi-sinusoidal
Acceleration	50g
Shock duration	11 ms
Test directions	X-, Y- and Z-axis (pos. and neg.)

### Ambient conditions

Ambient temperature (operation)	-40 °C ... 100 °C (Depending on the current carrying capacity/derating curve)
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Ambient temperature (storage/transport)	-40 °C ... 70 °C
Relative humidity (storage/transport)	30 % ... 70 %
Ambient temperature (assembly)	-5 °C ... 100 °C

## Packaging specifications

Type of packaging	packed in cardboard
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# UW 50/S - Panel feed-through terminal block

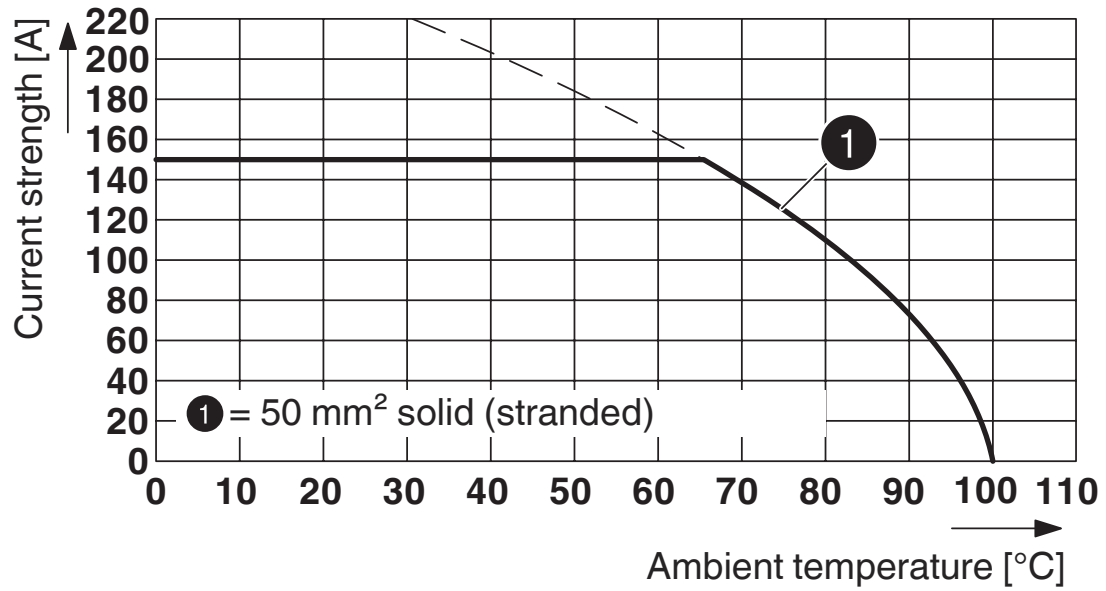


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## Drawings

Diagram



Type: UW 50/S

# UW 50/S - Panel feed-through terminal block





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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1713709>

 <b>cULus Recognized</b> Approval ID: E60425-20171106				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
Use group B	600 V	151 A	6 - 2/0	-
Use group C	600 V	151 A	6 - 2/0	-

 <b>VDE Zeichengenehmigung</b> Approval ID: 40047737				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
	1000 V	150 A	-	16 - 50



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## Classifications

### ECLASS

ECLASS-11.0	27141134
ECLASS-12.0	27141134
ECLASS-13.0	27141134

### ETIM

ETIM 9.0	EC001283
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### UNSPSC

UNSPSC 21.0	39121400
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## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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### China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

### EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
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## Accessories

### SZS 1,2X8,0 VDE - Screwdriver

1205082

<https://www.phoenixcontact.com/us/products/1205082>



Screwdriver, slot-headed, VDE insulated, size: 1.2 x 8.0 x 175 mm, 2-component grip, with non-slip grip

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### SZK PZ2 VDE - Screwdriver

1206463

<https://www.phoenixcontact.com/us/products/1206463>



Screwdriver, PZ crosshead, VDE insulated, size: PZ 2 x 100 mm, 2-component grip, with non-slip grip

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## CRIMPFOX 50R - Crimping pliers

1212041

<https://www.phoenixcontact.com/us/products/1212041>



Crimping pliers, for ferrules without insulating collar according to DIN 46228 Part 1 and ferrules with insulating collar according to DIN 46228 Part 4, 35 mm<sup>2</sup> ... 50 mm<sup>2</sup>, lateral entry, WM crimp

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## CRIMPFOX 25R - Crimping pliers

1212039

<https://www.phoenixcontact.com/us/products/1212039>



Crimping pliers, for ferrules without insulating collar according to DIN 46228 Part 1 and ferrules with insulating collar according to DIN 46228 Part 4, 10 mm<sup>2</sup> ... 25 mm<sup>2</sup>, lateral entry, WM crimp

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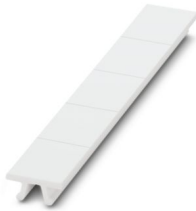
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## ZB 15:UNBEDRUCKT - Zack marker strip

0811972

<https://www.phoenixcontact.com/us/products/0811972>



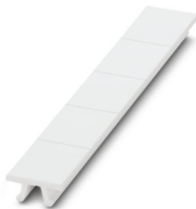
Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, for terminal block width: 15.2 mm, lettering field size: 10.5 x 15.1 mm, Number of individual labels: 5

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## ZB 15 CUS - Zack marker strip

0824945

<https://www.phoenixcontact.com/us/products/0824945>



Zack marker strip, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 15.2 mm, lettering field size: 10.5 x 15.1 mm, Number of individual labels: 5

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## ZBF 15 CUS - Zack Marker strip, flat

0825019

<https://www.phoenixcontact.com/us/products/0825019>



Zack Marker strip, flat, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into flat marker groove, for terminal block width: 15 mm, lettering field size: 5.15 x 15.1 mm, Number of individual labels: 5

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## ZBF 15:UNBEDRUCKT - Zack Marker strip, flat

0811202

<https://www.phoenixcontact.com/us/products/0811202>



Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, for terminal block width: 15 mm, lettering field size: 15 x 5.2 mm, Number of individual labels: 5

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